Application No.: 09/872,063
Examiner: Goldberg, Jeanine Anne

37 CFR §1.121(b)(1)(iii) and (c)(1)(ii)
CLAIM AMENDMENTS- MARKED UP VERSION

Please amend claims 1, 6, 14, 16, 18, 19 and 31 to read as follows:

1. (Amended) A detection method performed on a maternal serum or plasma sample from a pregnant female, which method comprises detecting the presence of a fetal nucleic acid [of fetal origin] in the sample by detecting nucleic acid which differs qualitatively or quantitatively from that of the maternal genome.

6. (Amended) The method according to claim 1, wherein the presence of a fetal nucleic acid sequence from the Y chromosome is detected.

14. (Amended) The method according to claim [9] 13, for Rhesus D genotyping a fetus in a Rhesus D negative mother.

16. (Amended) The method according to claim [6] 1, which comprises determining the concentration of [the] a fetal nucleic acid sequence in the maternal serum or plasma.

18. (Amended) The method according to claim [16] 1, for the detection of a maternal or fetal disease condition in which the [level] concentration of fetal DNA in the maternal serum or plasma is higher or lower than [normal] the concentration present in normal pregnancy.

19. (Amended) The method according to claim [16] 1 for the detection of a fetal disease condition wherein the pattern of variation of fetal DNA concentration in the maternal serum or plasma at particular stages of gestation is different from [normal] that of normal pregnancy.

31. (Amended) A method of non-invasive prenatal diagnosis for determining [maternal or] a fetal genetic condition[s] comprising:

obtaining plasma or serum from a sample of a pregnant female's blood, detecting fetal nucleic acid within the serum or plasma and determining the presence or absence of one or more selected nucleic acid sequences in the detected fetal nucleic acid.

Please cancel claims 24-30, without prejudice.

Please add the following new claims 33-36 as follows:

--33. A detection method performed on a maternal serum or plasma sample from a pregnant female, which method comprises detecting the presence of a fetal nucleic acid in the sample by detecting nucleic acid which differs in sequence or amount from that of the maternal genome.

34. The method according to claim 16, wherein the fetal nucleic acid sequence is a chromosome 21 sequence.

35. The method according to claim 16, wherein an increase in the quantity of fetal DNA above a population mean indicates an increased risk of fetal aneuploidy.

36. A detection method performed on a maternal serum or plasma sample from a pregnant female, which method comprises (a) amplifying a fetal nucleic acid sequence or isolating fetal cells, from maternal plasma or serum and (b) detecting the presence of a nucleic acid of fetal origin in the amplified sequence or isolated cells. --